Project Title: Developing a Practical Snow Data Assimilation Method
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Figures

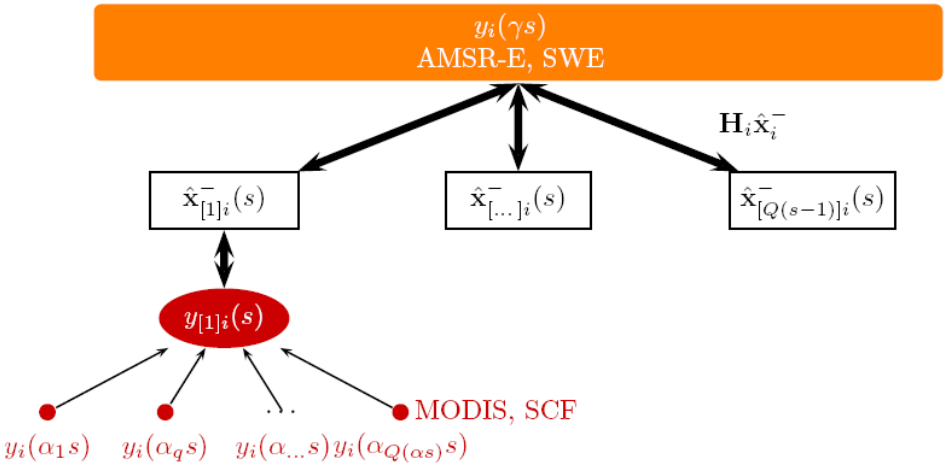

Figure 1.1: Flowchart of simultaneous assimilation of scale-discrepant MODIS and AMSR-E observations at time step i. The model predictions $\mathbf{x}^-(s)$ are performed at the s-scale. AMSR-E observations $y(\gamma s)$ are available at the coarser 'parent'-resolution γs, covering many model prediction grid cells. The model predictions will be brought into this coarser resolution observation space through the observation operator $\mathbf{H}_i$. MODIS data $y(\alpha_q s)$ are at the finer 'child'-resolution αs: $Q(\alpha s)$ MODIS pixels fall within one model grid cell and will be merged to an upscaled product $y(s)$ at the scale of the model predictions for assimilation.